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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,086	10/28/2003	Andreas Ganghofer	14399Z	5957
23389	7590	06/14/2005		EXAMINER
SCULLY SCOTT MURPHY & PRESSER, PC 400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530			ELLIS, SUEZU Y	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/696,086	GANGHOFER, ANDREAS	
	Examiner Suezu Ellis	Art Unit 2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 October 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-7 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 28 October 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____.                                   |

**DETAILED ACTION**

***Priority***

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on May 25, 2000. It is noted, however, that applicant has not filed a certified copy of the 100 25 962.6 application as required by 35 U.S.C. 119(b).

***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on October 28, 2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the optronic fuse system comprising a transmitter, a receiver, an amplifier chain, and a sensor connected ahead of the receiver and of the amplifier chain (preamble of claim 1) must be shown or the features canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, it is unclear what an "comprising effecting in a single calibration cycle" is. For examining purposes, that portion of the claim will be treated as a method comprising a calibration cycle.

With respect to claim 2, it is unclear as to what a medium measured value is. Is this different from the measured signal level (claims 1 and 3)? What is considered the

medium? Please clarify. For examining purposes, a medium measured value will be treated equivalent to the measured signal level in claims 1 and 3.

With respect to claim 7, it is unclear as to what a medium gain factor is. Is this different from the gain factor in claim 3? What is the medium? Please clarify. For examination purposes, the medium gain factor will be considered the same as the gain factor in claim 3.

Claims not specifically addressed are indefinite due to their dependency on an indefinite claim.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Nourrcier, Jr. (US 5,638,163).

With respect to claim 1, Nourrcier, Jr. discloses in Fig. 1, a laser range finder comprising a transmitter (laser module – 115), a receiver (16), an amplifier chain (transpedance amplifier 317 and a post-amplifier 155), and a sensor (avalanche photodiode photodetector - 315) which is the first component of the receiver and before the amplifier chain. Nourrcier, Jr. discloses measuring a temperature signal from a

temperature sensor (319) and adjusting the bias voltage of the APD, thus resulting in optimum sensitivity over the temperature range (col. 15, lines 25-33; col. 16, lines 3-9).

With respect to claim 2, Nourrcier, Jr. discloses measuring a temperature signal and performing temperature compensation (col. 10, lines 50-58).

With respect to claim 3, Nourrcier, Jr. discloses a microcontroller that adjusts the APD bias in response to a signal from the temperature sensor (col. 15, lines 25-30). Nourrcier, Jr. further discloses a correlation between the bias voltage and the gain wherein increasing the bias voltage increases the gain.

With respect to claim 4, Nourrcier, Jr. discloses the sensor comprises an avalanche-photodiode (APD) where the APD has a bias voltage set by the microcontroller.

With respect to claim 5, Nourrcier, Jr. discloses the bias voltage is set dependent upon the temperature (col. 16, lines 6-9).

With respect to claim 7, Nourrcier, Jr. discloses a microcontroller that adjusts the APD bias in response to a signal from the temperature sensor (col. 15, lines 25-30). Nourrcier, Jr. further discloses a correlation between the bias voltage and the gain wherein increasing the bias voltage increases the gain. Thus, the microcontroller sets the gain of the APD photodetector. Nourrcier, Jr. further discloses the microcontroller is a programmed processor with a software-driven architecture, thus an operating software system is inherent (col. 1, 62-63; col. 15, lines 62-63).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title; if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nourrcier, Jr. in view of Lau et al. (US 4,153,835). Hereinafter, Lau et al. will be referred to as Lau.

With respect to claim 6, Nourrcier, Jr. addresses all the limitations of claims 1 and 4, however fails to expressly disclose the step of compensating for temperature variation based on the sensor's temperature curve. Nourrcier, Jr. and Lau are directed to a similar problem solving area of temperature compensation. Lau teaches it is well known in the art to reference a component's temperature cure when performing temperature-based compensation (col. 3, lines 39-48). It would have been obvious to a person of ordinary skill in the art to modify the system of Nourrcier, Jr. by basing the temperature compensation operation directly on the sensor's temperature curve because it would facilitate more accurate biasing of the sensor.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Anderson (US 929,982) discloses an APD gain control for an optical receiver.

Motzko et al. (GB 2394269 A) discloses a proximity fuse with a laser range finder.

***Telephone/Fax Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suezu Ellis whose telephone number is 571-272-2868. The examiner can normally be reached on 8:30am-7pm (Monday-Thursday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Stephonie B. Allen  
Primary Examiner